Title:: Tool and Notation for Capturing and Communicating Enterprise and Technology Structures, Processes,

Strategies, and Concepts

Application Number: 10/602,566

## AMMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- (Current amended) An automated graphical element, of a graphical tool, that is
  manipulated and altered primarily by an associated user interface, wherein said
  element is used to visually represent a noun or verb, and where said element is
  comprised of the following automatically controlled elements:
  - (a) a plurality of predefined simple and complex shapes with predefined meaning
  - (b) a plurality of predefined icons representing the nouns
  - (c) variable text
  - (d) a plurality of predefined adornments with predefined meaning
  - (e) an attached, subordinate graphical container for additional <u>text and graphical</u> elements.
- (Current amended) The graphical element of claim 1 wherein said icons, and/or text, or both can be placed within said shapes, which will then orient to the size and shape of said icon, and which are then named objects, which are semantically equivalent to simple and compound nouns.
- 3. (Original) The objects of claim 2 are modified with said adornments, colors, and text, which are semantically equivalent to adjectives that describe, limit, and/or indicate hierarchy, location, behaviors, and/or responsibilities.
- 4. (Original) The objects of claim 3 wherein said objects are allowed to be presented in graphical or text formats.
- 5. (Original) The objects of claim 3 are linked with said graphical elements, which are semantically representative of a plurality of verbs.

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6. (Original) The objects of claim 3 wherein structured input areas are provided for the detailed specification of the object.

- 7. (Original) The objects of claim 3 wherein selected portions of the object specification are allowed to be displayed in a plurality of adornments to the shape.
- 8. (Original) The objects of claim 3 wherein there is a plurality of rule, process, and security object shapes.
- 9. (Original) The objects of claim 3 wherein there is a plurality of note, design point, initiative, and issue object shapes.
- 10. (Original) The objects of claim 3 wherein there is a plurality of adornments to identify process and hierarchy object shapes.
- 11. (Original) The objects of claim 3 wherein there is a plurality of user interface object shapes.
- 12. (Original) The objects of claim 3 wherein there is a plurality of domain object shapes.
- 13. (Original) The objects of claim 3 wherein there is a plurality of technology object shapes.
- 14. (Original) The graphical element of claim 1 wherein there is a plurality of adornments for components that contain their own icon or text.
- 15. (Original) The graphical element of claim 1 wherein there is an adornment to indicate plural or collections.

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16. (Original) The graphical element of claim 1 wherein specification documents are automatically generated from object information.

- 17. (Original) The graphical element of claim 1 wherein the identity of notation objects and relationships are accessed and managed.
- 18. (Original) The graphical element of claim 1 wherein output is provided to business and software construction tools.
- 19. (Current amended) A grouping graphical element used to enclose selected shapes and said element comprising a border of any shape that ean <u>must be able to</u> be infinitely, variably-shaped at all points and said element <u>may must be able to</u> have an attached, subordinate graphical container for additional elements.
- 20. (Current amended) A subordinate <u>graphical</u> container shape that is automatically connected to and controlled by <u>a its</u> parent shape or graphical element, comprising:
  - (a) a variable amount of text, and/or graphics, or both.
  - (b) an attachment point that can be positioned anywhere around the parent shape only at predetermined, appropriate points in the vicinity closest to where the user indicates.

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• I have interspersed questions to the examiner throughout my response. These discuss further language changes that might be needed if my claim changes were insufficient or my arguments are not convincing. I am willing to make any changes the examiner desires to get the language correct. The changes I have made to the claims are non-substantive to address Michelle's language objections. My expectation is that should we not come to agreement on the language for any reason, the next Office Action stating the objections will be NON-FINAL.

I believe that my arguments to Nachur and Viso selection indicator will be persuasive and the claims will be easily modified by the examiner should that be necessary.

- Response to response claim 19 rejection on Pages 2-3 of the Office Action:
  - 1. The most obvious oversight in Michelle's response is that I said "can" instead of "must".

Firstly, claim 19 states that the "element comprising a border of <u>any</u> shape". There is no "can" here. The Visio element border being referenced as prior art is "only" a rectangle" and is not "any" shape such as a circle. Michelle never responds directly to my remark #3.

Secondly, the claim adds additional requirements of the border "that it can be infinitely, variably-shaped at all points". So, not only is the Visio reference limited to a rectangle, it "can not" be infinitely, variably-shaped at all points as the claim requires. The language here is simple, can vs can not. The Visio reference "can not" so it is not prior art.

Question to examiner: I have changed "can be" to "must be able to be" if my argument is not satisfactory. Will this be clear enough? You may change it back if you find the original was OK.

Thirdly, Michelle argues that "may have" should have been "must have". There should be no argument that the Visio selection indicator does not have or allow for an "attached, subordinate graphical container. Thus, it "may not have" and thus fails as prior art.

Question to examiner: I have changed "may have" to "must be able to have" if my argument is not satisfactory. Will this be clear enough? You may change it back if you find the original was OK.

- 2. As to my arguments regarding the Visio selection indicator is not a shape or graphical element, I will not go into detail again since the "can" argument above should be sufficient to strike the Visio selection indicator as prior art. I will restate that the Visio manual never refers to it as a border, shape or graphical element but a manifestation of selection any selection not just a group. How can she claim that it is when the Visio author says it is not? Michelle is mistaken when she says that my claim language does not have those limitations but it explicitly states a graphical element with a border of any shape. Ask any Visio user, Microsoft, or the Visio creator if the selection indicator is a shape and they will say NO.
- Response to response to claim 20 rejection on Page 3 of the Office Action:
  - 1. Michelle failed to address ANY of my arguments and dismissed them all by saying "fails to point out how Applicant's invention over comes the prior art." I request that they be addressed. I have repeated the arguments below with a specific statement regarding my invention:
    - a. Nochur has notes and annotations (documents) that are linked to by clicking on icons or an indicator in the main shape. This is similar to an email with an attachment and icon to show that it exists and to be clicked upon to open the attachment. These are not <u>subordinate</u> to the main shape, but merely linked to by the main shape. He even calls them links. Therefore, Nochur does not satisfy the "subordinate"

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requirement of my claim.

b. The Nochor icons and document are separate entities not a single subordinate container <u>shape</u>. They are even referred to as distinct items – a *visual cue* for the icon and *notes and attachments* for the documents. Therefore, Nochur does not satisfy the "shape" requirement of my claim since they are not shapes but rather distinct items.

- c. The Nochor documents exist physically as separate, independent documents on disk. This is demonstrated by Figure 8 element 82 which shows their filenames. Thus they can be accessed independently without the main shape and are not <u>subordinate to</u> or <u>controlled by</u> the main shape. Thus they do not satisfy the "subordinate" or "controlled by" requirements of my claim.
- d. Nochur's attached documents are not <u>controlled by</u> the main shape they are independent documents that are manipulated and edited by separate mechanisms. For example, the text in the document is manipulated by an independent editor not the controller for the shape. This is evidenced by the fact that the text can only be changed by first opening the document. The text in my subordinate shapes is manipulated by the same inspector that controls the parent shape and can be edited whether the subordinate shape is visible or not. Therefore, Nochur does not satisfy the "controlled by a parent shape" requirement of my claim.
- e. Nochor's attached documents are not graphical elements. They are opened by clicking on a graphical element an icon. Therefore, Nochur does not satisfy the "controlled by a parent shape" requirement of my claim.
- f. Nochor's attached documents are not <u>shapes</u> in the same way as an attached document to an email is not considered a graphical element or shape. They are just documents. Therefore, Nochur does not satisfy the "subordinate container shape" requirement of my claim since they are not shapes.
- g. The Nochor attached document is not a <u>container</u> shape nor does he reference it in that way. Therefore, Nochur does not satisfy the "subordinate container shape" requirement of my claim since they are not containers.
- h. Nochor's attached documents and not <u>connected to</u> the main shape. They are pop-ups that may or may not touch the main shape. Figure 15 in the Drawings Section of my patent application shows the subordinate container shape physically attached to the parent shape in four examples. Therefore, Nochur does not satisfy the "connected to" requirement of my claim since they are not connected.
- i. Since the attached documents are not connected to the main shape(see 5), they cannot be positioned by an <u>attachment point</u>. The Nochor icons are not the subordinate shape but a visual cue to be clicked to materialize the linked document. Even so, they are not <u>attachment points</u> nor are they positional by the user. Also, the Nochor documents are not attached at a <u>point</u> since they will appear at an unspecified place. Therefore, Nochur does not satisfy the "attachment point" or "positioned anywhere" requirements of my claim since they are not attached or positional.
- j. I use the word *connected* to mean joined or physically touching and moving together. My use of *attach* point further says that they are physically attached and touching. Nochor uses the language separate box to describe the attached document which says they are not connected. Nochor also referes to them as an attachment and linked which are terms used to show they are removed from not connected. Therefore, Nochur does not satisfy the "connected to" requirement of my claim since they are not connected, thy are separate as Nochur text explicitly states.

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k. Nochor's documents are only visible when the related icon is clicked. They will not move with the main shape and will not print with the main shape. Therefore, they do not satisfy the "subordinate" or "controlled by" requirements of my claim.

- Nochor doesn't talk about his main object as a <u>parent</u> shape that has a subordinate shape. He doesn't see it that way and doesn't use that language. Therefore, they do not satisfy the "subordinate" requirement of my claim.
- m. There are no written statements or figures in Nochor that say the attachments can have graphics as required by my claim. All figures show only text. Therefore, they do not satisfy the "comprising a variable amount of text and/or graphics" requirement of my claim.
- n. Nochor Figure 7 shows the popup touching two shapes at many points at random based on the size of the screen. There isn't an attach point and it is not discernable which shape caused the popup (other than the legend used for the patent which is not a part of the invention). Therefore, they do not satisfy the "comprising an attachment point" requirement of my claim.
- o. My attachment point must be available but doesn't have to be used if the subordinate shape is in the desired location to state. I use "can" to mean "is capable of" should the user desire or need to. What is a better phrase than "can be positioned"?

Question to examiner: I have changed "can be" to "must be able to be" if my argument is not satisfactory. Will this be clear enough? You may change it back if you find the original was OK.

- Response to objection of Specification on Page 4 of the Office Action:
  - 1. The drawings are described on pages 4 and 5, [11] [32] of the specification. This sufficiently describes the drawings. I did have other references to the drawings to which you refer but Blake Betz, prior examiner, suggested I take them out because it was not common, but not wrong, to have references in the claims. I couldn't move the descriptions to the main specification because Blake said that isn't allowed or would cause a final rejection. Regardless, the descriptions on pages 4 and 5 are sufficient. For example, Figure 1B is described as a continuation of the domain shapes from Figure 1A. Michelle had no objection to the description of 1A so "continued" should be sufficient. Same for Figure 2, those are the technical shapes. Nothing more can be said.

Question to examiner: If my argument is not satisfactory, may I add figure description text to the specification section without causing a final rejection or getting some other violation? If not, how should this be addressed?

- Response to response to claim 1 rejection on Pages 2-8 of the Office Action:
  - 1. Michelle does not address the entirety of my arguments and only addresses selected phrases out of context. I request that they be addressed in totality.
  - 2. Michelle's argument that Nochur has a library with pre-built symbols ignores my argument that Nochur allows symbols to be created and thus they are not predefined with predefined meaning as required by my claim.
  - 3. Michelle states that my claim language "only discloses" but does not "limit as to how these elements are done so". The limiting is explicitly stated in the claim as "predefined ... with predefined meaning". There are even pictures in the figures section. Michelle's concluding statement regarding "limiting" makes no sense: "Thus, the program code segments are valid in generating the symbols of Nochur to represent these nouns and verbs". It

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seems this is a twisted way to say that Nochur's "program segments" can also be nouns and verbs. The language of both inventions is clear: Nochur shapes represent "program code segments" and my invention shapes represent "nouns or verbs". No one can confuse those differences.

- 4. Michelle is ignoring the word subordinate. Nochur's documents are "independent of" not "subordinate to" the parent shape. I explain this in my remarks and give visual examples. I have even added language per the previous examiner (automatically controlled, controlled by a parent) to further explain.
- Thus I believe I have adequately addressed the rejections and responses to my responses to those rejections. I suggest that Michelle's objections stem from the definitions of the words can, subordinate, attached, point, container, and shape. I have already made language changes based on input from Blake Betz and I am willing to make further changes. I still argue that I am entitled, per MPEP 706.07(a), to this assistance.
- In the latest office action, Michelle has added additional reasons for rejection and I will address those on the following pages.

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Response to rejection of claims 8, 9, and 20 on Pages 5-6 of the Office Action:

- In terms of the enablement requirement, Claims 8 and 9 describe predefined shapes with the predefined 1. meanings of rule, process, security, note, design point, initiative, and issue. The only enablement specific to theses predefined objects is their graphical shape which is shown in the figures. Any graphic artist can
- As to the indefinite requirement, Claims 8 and 9 are clear. They are just what they say: rules, processes, 2. security, notes, design points, initiatives, and issues. What might be the confusion is the difference between building the graphical elements of the tool being claimed and the use of the tool by end users. For example, building a CAD package and using it to design a house are different skills. As I understand it, the patent doesn't have to show how to design a house. That requires a specific college education.
- As to the enablement and indefinite problems with claim 20, "variable amount" simply means "any amount desired by the user" just as a word processor document can contain a variable amount of text.

Question to examiner: I will change "variable amount" to "infinitely variable amount" if my argument is not satisfactory. Will this be clear enough?

As to the enablement and indefinite problems with claim 20, "predetermined, appropriate" simply means 4. "specified by the tool creator and not by the tool user". Appropriate means visually appropriate and is determined by the tool creator. The salient requirement here is that it is the tool creator not user that

Question to examiner: How should this be worded to remove the objection?

- Response to rejection of claim 1 on Pages 7-10 of the Office Action:
  - Michelle's statement that "The invention of Nochur discloses a computer- method and system for representing 1. and communicating various conceptual and physical entities" is incorrect. The stated intent of Nochor is to "create applications" while the stated intention of my invention is "CAPTURING AND COMMUNICATING ENTERPRISE AND TECHNOLOGY STRUCTURES, PROCESSES, STRATEGIES AND CONCEPTS.." Nochor's uses applications to mean computer programs and his unique-ness is that they are domain-specific applications. The intent of my invention is the documentation of all business communication including, for example, strategy which is not covered at all by Nochor. The "domain specific" language of Nochur is commonly used today to discuss the generating of software applications specific to a domain.
  - Michelle's assertion that "Nochur explicitly teaches" my claim one is outrageously false. She might mean that 2. it implicitly teaches but nowhere in the Nochur is it explicit. No text in the Office Action substantiates this explicit teaching nor is there any text in their patent. My previous remarks regarding Nochur in this response and my previous response should be sufficient to dismiss Nochur as prior art but I will respond below to the snippets of new wording in the office action.
  - Pages 8-10 of the Office Action pull snippets of text and graphics from Nochur and incorrectly aligns them 3. with snippets from my claims. I have addressed each of the snippets individually above and in my previous remarks. Let me present some key differences here:

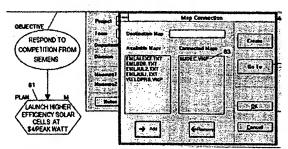
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a. Nochur is a system for representing and communicating conceptual and physical entities with the intent of generating code. My invention is for communicating all nouns and verbs in visual sentences and not just conceptual and physical entities.

- b. Most modeling tools have objects or entities with attributes as does Nochur. Nochur uses traditional flowcharting symbols for the entity and pop-ups for the attributes. Nochur doesn't claim or have any invention in this area. My invention is in the way the information is presented. The difference in presentation is clear in remarks Figures 1&2 below. My claims 1 and 20 attempt to describe the uniqueness.
- c. Nochur shapes do not have ALL of the items stated in my claim 1.
- d. Nochur pop-ups are not **attached** as required by my claim 1. They float. And, since they are not attached, they don't have an attachment point as required by my claim 2.
- e. Nochur pop-ups are not **subordinate** as required by my claim 1. They appear where they want, are manipulated directly, and moved independently of the parent shape. Additionally, the Nochur shape does not **control** the pop-up as required by my claim 1.
- f. Nochur pop-ups are not **containers** as required by my claim 1 and the generally accepted use of the word. They are pre-formatted pop-ups for data.
- g. Nochur pop-up for Map Connect is not a subordinate shape twice over. It is merely a list of links to other files that are completely independent of the shape or the claimed system. They can be accessed directly from the file system.
- h. Nochur pop-ups cannot contain graphics as required by my claim 20. Notice the picture of the pilot in remarks figure 2.
- i. Nochur shapes are not predefined with predefined meanings as required by my claim 1.
- j. Nochur either does not have either **predefined icons** or **predefined adornments**. In Michelle's arguments, she uses the same icon to for both. Nochur might have one (debatable) but it surely doesn't have two or more. Notice the clock and the pilot icon in remarks figure 2. Also, Michelle mistakenly considers a letter M adornment as an icon. One is text and the other is a graphic.

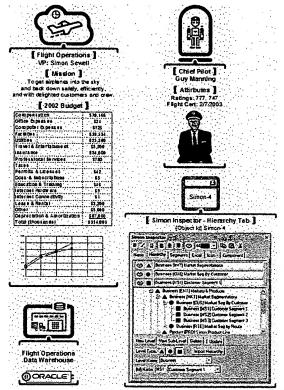


remarks figure 1: from Nochur

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remarks figure 2: from Sewell

- Response to rejection of claim 14 on Pages 10-11 of the Office Action:
  - 1. The Oracle Component icon in remarks figure 2 is an example of claim 14. Michelle's comment is suggesting that Nochur line adornments such as the arrow head in remarks figure 1 above are the equivalent of claim 14. This must be a typo. Claim 14 talks about an element of my claim 1 shape. Nochor's relationship lines are not pertinent.
- Response to rejection of claim 15 on Page 11 of the Office Action:
  - 1. The M indicator in Nochur indicates there is an attached map. It does not indicate that the object is plural or a collection. For example in remarks figure 1 above, the M on the lower shape does not indicate that "LAUNCH EFFICIENCY SOLAR CELLS AT \$4/PER PEAK WATT" is plural. It says there is a Map pop-up.
- Response to rejection of claim 17 on Page 12 of the Office Action:
  - 2. Nochur objects do not have "identity" and Michelle's argument doesn't refer to identity at all.
- Response to rejection of claim 20 on Pages 13-14 of the Office Action:
  - 1. See 3a-j above and my previous remarks regarding the vocabulary of subordinate, container, attached, or point.

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Response to rejection of claim 19 on Pages 14-15 of the Office Action:

- 1. I have stated my arguments to this in my previous remarks and a rebuttal to Michelle's rebuttal is above. Please refer to these two discussions.
- Response to rejection of claim 18 on Pages 15-16 of the Office Action:
  - 1. Nochur only creates code that is output to a compiler. It cannot input to other business tools as my claim 18 requires. It cannot output to other software construction design tools. I had examples to clarify this but Blake suggested I remove them. I would be happy to expound on this item at the examiner's request.
- Response to rejection of claim 2 on Pages 16-17 of the Office Action:
  - 1. I am surprised that the "and" in "and/or" doesn't require both but I have changed the claim to be more specific. The reset of Michelle's comments regarding text don't address the objection and her extrapolation that a phrase alias is equivalent to a noun is totally incorrect. I will not address these objections since my change to require both graphics and text precludes Nochur anyway but will elaborate if the examiner requires.
- Response to rejection of claim 3 on Page 18 of the Office Action:
  - 1. I am not sure what is meant by Michelle's phrase "the rationale of claim 1 is incorporated herein". Please explain. This dependant claim is a further description with more detail. That detail clearly shows that Nochur adornments are not relevant. Also, Nochur does not contain any hierarchy indication or have the concept of a hierarchy.
- Response to rejection of claim 4 on Page 18 of the Office Action:
  - 1. I am not sure what is meant by Michelle's phrase "the rationale of claim 1 is incorporated herein". Please explain. This dependant claim states that the objects can be presented graphically or flattened into a text format.
- Response to rejection of claim 5 on Page 18 of the Office Action:
  - 1. I am not sure what is meant by Michelle's phrase "the rationale of claim 1 is incorporated herein". Please explain. This dependant claim states that the objects can be presented graphically or flattened into a text format. Furthermore, Michelle's extrapolation of Nochur relationships as "verbs" is invalid. Her statement is saying that hierarchy is a verb. Nochur has no intention to create sentences with relationships as verbs no does he mention tat relationships are verbs.
- Response to rejection of claims 6 and 7 on Page 18 of the Office Action:
  - 1. I am not sure what is meant by Michelle's phrase "the rationale of claim 1 is incorporated herein". Please explain. This dependant claim states that the objects can be presented graphically or flattened into a text format. The N referred to is an indication that there is a notepad and are not "portions of the specification" as required by claim 7 nor in N a plurality.
- Response to rejection of claims 8,9, 11-13 on Page 19 of the Office Action:
  - 1. This objection is very confusing. It states that "this embodiment enables users to create applications that are specific to the domain of interest to them" and goes on to describe domain examples. My claims 1, 8, 9, 11, and 13 have nothing to do with creating applications. For that matter no part of my invention claims the ability to create applications. The objection then seems to say that a Nochur element (an application) is equivalent to

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my claim 1 graphical element and then extrapolates that to Nochur symbols. This argument is actually part of my argument that Nochur symbols represent applications and not nouns. The rest is not relevant to my describing predefined noun types. I need much more clarification to make any sense of this one.

Response to rejection of claim 10 on Page 20 of the Office Action:

1. This objection is very confusing. It is referencing a "link generator module" used for "defining line and arrow segments" and things you can do with these "link types". The fact that these "link types" can be put in a hierarchy or that they have adornments is not relevant to my claim 1 graphic element having process and hierarchy identity adornments. I need much more clarification to make any sense of this one.

On- Swell